

IN THE CLAIMS:

Please amend claims 19, 32, 96, 98, and 99 please cancel claims 26 and 37, and please add new claims 100-101 as follows. Applicants reserve the right to prosecute the cancelled claims in a continuation/divisional application.

Claims 1-18 (Canceled).

Claim 19 (Currently Amended). A substrate processing apparatus, comprising:

an evaporation shield adapted to be positioned over a substrate ~~disposed on~~
contacting a substrate support, the evaporation shield having and ~~and having~~ a fluid
retaining surface adapted to form a gap with respect to the substrate, wherein the
thickness of the gap is between about 0.5 millimeter and about 4 millimeters.

Claim 20 (Original). The apparatus of claim 19, wherein the evaporation shield is sized to substantially cover the substrate.

Claim 21 (Canceled).

Claim 22 (Previously Presented). The apparatus of claim 19, wherein the gap is adapted to be filled with a fluid layer.

Claim 23 (Original). The apparatus of claim 22, wherein the evaporation shield further comprises at least one port to deliver a fluid to form the fluid layer.

Claim 24 (Original). The apparatus of claim 22, wherein the evaporation shield further comprises at least one port to reclaim a fluid on the substrate.

Claim 25 (Original). The apparatus of claim 22, wherein the evaporation shield further comprises at least one port to deliver a fluid to form the fluid layer and to reclaim the fluid on the substrate.

Claim 26 (Canceled).

Claim 27 (Original). The apparatus of claim 19, wherein the evaporation shield comprises a degassing membrane.

Claim 28-31 (Canceled).

Claim 32 (Currently Amended). A substrate processing apparatus, comprising:

an evaporation shield adapted to be positioned over a substrate ~~disposed on~~
contacting a substrate support, the evaporation shield having and—having a fluid
retaining surface adapted to form a gap with respect to the substrate, wherein the gap is
adapted to be filled with a fluid layer, and

a transducer coupled to the evaporation shield to provide acoustic waves to the
fluid layer.

Claim 33 (Original). The apparatus of claim 32, wherein the transducer is disposed
against the evaporation shield.

Claim 34 (Original). The apparatus of claim 32, wherein the transducer comprises a rod
which is adapted to contact the fluid layer.

Claim 35 (Original). The apparatus of claim 22, wherein the evaporation shield further
comprises a seal adapted to contact the substrate support.

Claim 36 (Original). The apparatus of claim 22, wherein the substrate support further
comprises a seal adapted to contact the evaporation shield.

Claim 37 (Canceled)

Claim 38 (Original). The apparatus of claim 22, wherein the evaporation shield further comprises fluid agitation components selected from the group consisting of channels, veins, and protrusions, the fluid agitation components being disposed on a bottom surface of the evaporation shield.

Claim 39 (Original). The apparatus of claim 19, wherein the evaporation shield comprises a material selected from the group consisting of polymers, ceramics, quartz, and coated metals.

Claim 40 (Original). The apparatus of claim 19, wherein the evaporation shield comprises a polymer material.

Claim 41-95 (Canceled).

Claim 96 (Currently Amended). A substrate processing apparatus, comprising:
an evaporation shield adapted to be positioned over a substrate disposed on contacting a substrate support, the evaporation shield comprising a degassing membrane and a plenum in communication with the degassing membrane.

Claim 97 (Previously Presented). The apparatus of claim 96, wherein the evaporation shield further comprises a plenum port coupled to the plenum.

Claim 98 (Currently Amended). ~~The apparatus of claim 97, further comprising A~~
substrate processing apparatus, comprising:
an evaporation shield adapted to be positioned over a substrate disposed on a
substrate support, the evaporation shield comprising a degassing membrane and a
plenum in communication with the degassing membrane, and
a vacuum source coupled to the plenum port.

Claim 99 (Currently Amended). ~~The apparatus of claim 97, further comprising A~~
substrate processing apparatus, comprising:

an evaporation shield adapted to be positioned over a substrate disposed on a
substrate support, the evaporation shield comprising a degassing membrane and a
plenum in communication with the degassing membrane, and
a low partial pressure source coupled to the plenum port.

Claim 100 (New). The apparatus of claim 22, wherein the evaporation shield is adapted to provide heat to the fluid layer.

Claim 101 (New). The apparatus of claim 22, wherein the evaporation shield is adapted to rotate.